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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,136	07/08/2003	Chin-Liang Lin	L9079.03103	5979

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EXAMINER

ALI, SHUMAYA B

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/614,136	LIN ET AL.	
	Examiner	Art Unit	
	Shumaya B. Ali	3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 7 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>detailed action</u> . |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 5, lines 4-7, filed 2/22/2005, with respect to the objection to claim 5, figure 1 have been fully considered and are persuasive. The objection of claim 5, figure 1 has been withdrawn.
2. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "medical-treatment chair that employs an air-curtain shield to: 1) prevent the occurrence of cross-infection among people due to air-borne germs or sputter, and 2) provide a clean-air environment for medical treatment of a patient suffering from pulmonary disease" see page 5, lines 17-21) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, applicant's arguments presented on page 5, lines 17-21 are not considered for patentability.
3. Applicant's arguments, see page 8, lines 20-23, filed 2/22/2005, with respect to "Inoue does not anticipate the subject matter defined by claim 1" have been fully considered and are persuasive, however claim 1 can be rejected under 35 U.S.C. 103(a) since subject matter disclosed in the embodiments (figures 1 and 32-35) cited in the Office Action (corresponding date-11/17/2004) are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Therefore, claim 1 and all claims depend therefrom stand rejected.
4. Applicant's arguments regarding **"the applicable field of the claimed invention is absolutely different from that of Inoue's invention", see page 5, lines 14-15; "a vertical downwardly-laminated**

airflow that provides an air-curtain shield” see page 8, lines 14-15, and “combination of a seat surface, a seat back, and two hood-walls that form an isolated and bag-shaped inner cabin inside the protecting medical-treatment chair” see page 8, lines 17-19 have been fully considered but they are not persuasive.

5. Applicant's invention is a “bag-shaped” chair providing a “vertical downwardly laminated airflow” that creates an “air-curtain shield” for a person sitting inside the chair. The limitations “isolated” “inner cabin inside the protecting medical-treatment chair” are not claimed, therefore, those limitations are not considered for patentability. Inoue et al. (US Patent 5,450,894) invention evidently teaches a chair (car seat) with air curtain principle required by the applicant. As cited in the office action, see rejection under claim 1 and 3, Inoue et al. disclose an air-conditioning system coupled to suction slots situated below an air outlet, and the said slots suck air as they come out of the outlet to form an air curtain shield to prevent outside air from being taken into the cooled air flow (see col.17 lines 6-7) provided by the air-conditioning system. The air conditioning system with compressor and condenser are inherently capable of providing some air-filtration function as well. As agreed by the applicant, Inoue et al. discloses a lateral downwardly air-flow, see page 8 line 15, however said lateral downwardly air-flow is referring to figure 1. The limitations “a vertical downwardly laminated air flow” is disclosed in the embodiment 3 figures 32-35 (see claim 3 rejection below for obvious type reasoning). The embodiment 3, figs 34-35 also teaches claim 1 limitations “a top-hood” and “hood-wall positioned on both sides of the seat back” forming a “bag shaped inner space” that are not disclosed in the embodiment 1. The combination of embodiment 1 and 3 of Inoue et al. is capable of providing a downward vertical lamina airflow creating an air-curtain shield for a user sitting under the bag-shaped inner space (see rejection under 103 for obvious type reasoning). Therefore, Inoue et al.

invention is capable of overcoming the two indispensable technical features claimed by the applicant, see page 8 lines 14-19.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,5,7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. US Patent 5,450,894.

7. **As to claim 1**, Inoue et al. disclose a chair (car seat) with air-curtain shield (see Fig.1 and col.16 lines 65-68) comprising an air-curtain chair (see attached Fig.1) with a main-body (see attached labeled Fig.1) and at least one set of air-suction and cleaning equipment (see Fig.1 reference objects 90 and 92) which are connected to form an air filtration and circulation system to generate air-curtain shield and filtrate the air making it suitable for cyclic-use, and the said air-suction and cleaning equipment (see Fig.1 reference objects 90 and 92) has an air suction inlet (see attached Fig.41) and an air discharging outlet (see attached Fig.41) through which when the air-suction and cleaning equipment (see Fig.1 reference objects 90 and 92) is in operation, the air is sucked into the equipment for filtration and cleaning treatment, and then discharged from the air discharging outlet (see attached Fig.41); wherein the said main-body (see attached Fig.1) of the air-curtain chair comprises a seat surface (Fig.1 reference object 50), a seat back (Fig.1 reference object 52) and two hood-walls (see attached Fig.33); the said seat back extends from the

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bottom at the rear edge of the seat surface upwardly and then horizontally to form a top-hood (see attached Fig.33) which, together with the hood-wall positioned on both sides of the seat back, forms a bag-shaped inner space (see attached Fig.33) inside the main-body of the said air-curtain chair, at the two corners along the front edge of the seat surface are the suction slots (see Fig.4B reference object 60) arranged in a manner symmetric to each other with an air suction tube connector installed at its bottom, and the air suction tube connector (see attached Fig.41) is connected to the air suction inlet (see Fig.41) of the said air-suction and cleaning equipment by means of an air suction tube (see Fig.41 reference object 201); inside the seat back and the top-hood is an air flow passage (Fig.1 reference object 66) extended from the bottom of the seat back to the front edge of the top-hood with an air supply tube connector (see attached Fig.41, Fig.1 reference object 64) installed at the end of the bottom portion of the seat back which is connected to the air discharging outlet (see attached Fig.41) of the said air-suction and cleaning equipment by means of an air supply tube (see Fig.41 reference object 203), and at the bottom of the top-hood (see attached Fig.33) near the front edge is an air outlet (see Fig.1 reference object 72) which can generate an air-curtain shaped flow stream with a range covering at least the whole front edge of the said seat surface (see attached Fig.1). The embodiment 3, figs.34-35 teaches claim 1 limitations "a top-hood" and "hood-wall positioned on both sides of the seat back" forming a "bag shaped inner space" (see claim 1 lines 14-18) that are not disclosed in the embodiment 1. Since the applicant does not provide a definite concise meaning of the term "bag shaped", examiner considers a bag can come in different sizes and shapes, therefore, with a reasonable broadest interpretation, the two side hood-walls with a top hood in continuous with the seat back is capable of creating an inner space (see attached fig.33 provided in the office action), which is considered "bag shaped". The embodiment 3 teaches the shape of the walls flatten airflow as discharged is obtained. An arc shaped top wall depicted in fig.35 is preferably for obtaining a uniformly

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distributed air curtain around the passenger (see col.17 lines 40-44). Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify the embodiment 1 in view of embodiment 3 in order to provide a bag-shaped inner space for the purposes of concentrating, flattening, and uniformly distributing air curtain around a passenger.

8. **As to claim 2**, Inoue et al. disclose an air outlet (see attached Fig.41) is located at the bottom of the said top-hood at the location corresponding to the air suction slot on the said seat surface (see Fig.1 reference objects 60, 72, col.16 lines 60-68, and col.17 lines 2-5).

9. **As to claim 3**, Inoue et al. disclose the opening of air outlet at the bottom of the top hood are air flow guide (see Fig.1 reference object 72) which can make the air flow stream a downward lamina flow, **however fig.1 does not disclose in vertical (downward) direction.** The embodiment 3, figures 32-35 teaches a plurality of outlet openings that are opened to a position located rearwardly of and slightly above a headrest. Furthermore, a cover portion is provided that overhangs the upper part of a sitting person. The overhang portion is merely recessed to provide an outer vertical guide plate for guiding the flow from the discharge outlet (see col.17 line 23-30). Therefore, a plurality of outlet opening with an outer vertical guide plate overhang is capable of producing an air curtain shield in a downward vertical direction (the downward vertical lamina flow is clearly depicted by the small arrows in figure 35). Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify the invention of embodiment 1 in view of embodiment 3 in order to provide the air-curtain chair with a plurality of outlet opening with an outer vertical guide plate overhang for the purposes of directing air-curtain shield in a vertical downward direction.

10. **As to claim 5**, a close review of specification reveals that the applicant did not establish any criticality of the L and I shaped suction slots. Therefore, it would have been obvious to one of ordinary skills in art to design a suction slot L or I shaped for the purposes of meeting their design preference.

11. **As to claim 7**, Inoue et al. disclose the air suction slots at the corners of the said seat surface are in rectangular shape (see Fig.4B reference object 60 and col.7 lines 42-44).

12. **As to claim 9**, applicant considers medical level air-suction and cleaning equipment comprising an air suction inlet (see attached Fig.41), an air discharging outlet (see attached Fig.41) and an air filtration-sterilization unit (compressor and condenser) (see attached Fig.1 reference objects 90 and 92). Therefore, it would have been obvious to one of ordinary skill in the art to consider the air suction and cleaning equipment as disclosed by Inoue et al. to be equipment of medical level.

Specification

13. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: regarding claim 4, the applicant failed to disclose "a hood-shaped suction nozzle" in the specification.

Conclusion

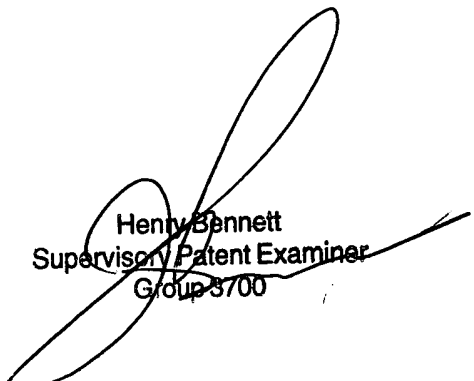
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Shumaya B. Ali** whose telephone number is **571-272-6088**. The examiner can normally be reached on M-F 8:30 am-4: 30 pm.

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15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Henry Bennett** can be reached on **571-272-4791**. The fax phone number for the organization where this application or proceeding is assigned is 571-273-6088.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shumaya B. Ali
Examiner
Art Unit 3743



Henry Bennett
Supervisory Patent Examiner
Group 3700

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Prior Art

Inoue et al. Sep. 19, 1995

U.S. Patent 5,450,894

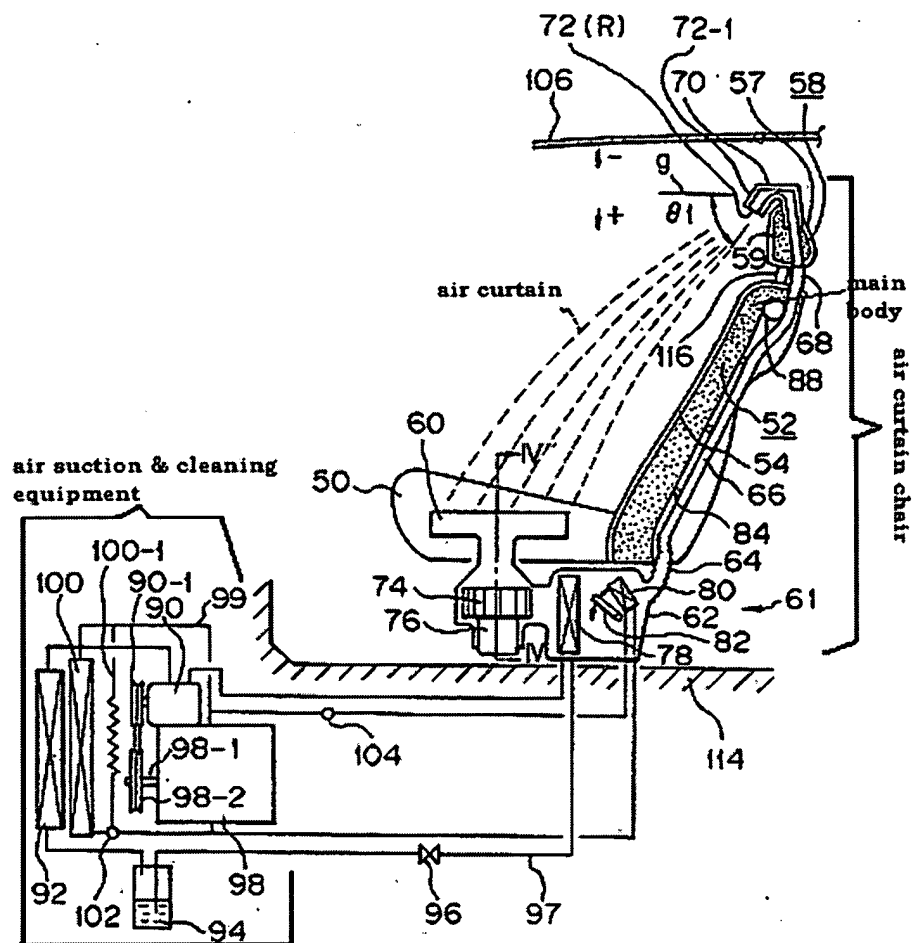


Fig. 1

